

Patent Claims

What is claimed:

1. An active matrix organic electroluminescence display device,
5 comprising:
a thin film transistor, comprising:
a gate metal disposed on a substrate;
a dielectric insulation layer covering said gate metal and said
substrate;
10 a source/drain metal disposed on said dielectric insulation layer and
above said gate metal; and
a passivation layer covering said source/drain metal and being a
multi-layer structure; and
an organic light emitting diode, comprising:
15 an anode electrode connected to said source/drain metal;
an organic emitting layer formed on said anode electrode; and
a cathode electrode formed on said organic emitting layer.
2. The active matrix organic electroluminescence display device of
20 Claim 1, wherein each layer of said multi-layer structure is made of
a different dielectric material.
3. An active matrix organic electroluminescence display device,
comprising:

a thin film transistor, comprising:

a gate metal disposed on a substrate;

a dielectric insulation layer covering said gate metal and said substrate;

5 a source/drain metal disposed on said dielectric insulation layer and above said gate metal; and

a passivation layer covering said source/drain metal, wherein the surface of said passivation layer is thermally oxidized; and

an organic light emitting diode, comprising:

10 an anode electrode connected to said source/drain metal;

an organic emitting layer formed on said anode electrode; and

a cathode electrode formed on said organic emitting layer.

4. The active matrix organic electroluminescence display device of
15 Claim 3, wherein said passivation layer is made of SiNx and the surface thereof is thermally oxidized to form SiON.

5. An active matrix organic electroluminescence display device,
comprising:

20 a thin film transistor, comprising:

a gate metal disposed on a substrate;

a dielectric insulation layer covering said gate metal and said substrate;

a source/drain metal disposed on said dielectric insulation layer and above said gate metal; and

a passivation layer covering said source/drain metal and composed by a high dielectric material; and

5 an organic light emitting diode, comprising:

an anode electrode connected to said source/drain metal;

an organic emitting layer formed on said anode electrode; and

a cathode electrode formed on said organic emitting layer.

10 6. The active matrix organic electroluminescence display device of Claim 5, wherein said passivation layer is made of SiO₂.